

CLAIMS

WHAT IS CLAIMED IS:

1. A satellite uplink for use in connection with a webcasting system for capturing live media content at a first location and webcasting the live media content to a second location, said webcasting system including a satellite communication link having a transmission propagation delay, a communication satellite, an encoder encoding the live media content into a first webcast format at the first location, said webcast format being sensitive to the transmission propagation delay and requiring at least one transmission acknowledgment signal, the satellite uplink comprising:

5 a control processor receiving the live media content in the first webcast format and providing the at least one transmission acknowledgment signal to the encoder, said control processor converting the live media content to a second webcast format having a characteristic such that the second webcast format is insensitive to the transmission propagation delay;

10 a satellite communications signal converter receiving the live media content in the second webcast format, said satellite communications signal converter converting the live media content received in the second webcast format to a satellite transmission signal compatible with the satellite communication link; and

15 a satellite transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite over the satellite communication link wherein the satellite downlinks the satellite transmission signal for reception on the earth at the second location.

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2. The satellite uplink of claim 1 wherein the first webcast format utilizes a TCP protocol having a first propagation delay tolerance less than the propagation delay of the satellite communication link and wherein the satellite uplink acts as a TCP endpoint such that second webcast format is insensitive to the propagation delay.

3. The satellite uplink of claim 2 wherein the second webcast format comprises a modified TCP protocol having a second propagation delay tolerance in excess of the propagation delay.

4. A webcasting system for webcasting media content over a satellite communication link having a transmission propagation delay and including a communication satellite, said webcasting system comprising:

an encoder encoding said media content into a first digital webcast signal having a first digital webcast format that is sensitive to the transmission propagation delay, said encoder requiring receipt of at least one transmission acknowledgment signal; and

an uplink router comprising:

a control processor receiving the first digital webcast signal and providing the at least one transmission acknowledgment signal to the encoder, said control processor converting the first digital webcast signal to a second digital webcast signal being insensitive to the transmission propagation delay;

a satellite communications signal converter receiving the second digital webcast signal, said satellite communications signal converter converting the second digital webcast signal into a satellite transmission signal; and

15 a satellite transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite such that the satellite downlinks the satellite transmission signal for reception on the earth.

5. The webcasting system of claim 4 further comprising:  
an earth station in electronic communication with the satellite, said earth station  
receiving the satellite transmission signal and converting the satellite transmission signal into  
a third digital webcast signal having the first digital webcast format; and  
a router receiving the third digital webcast signal and routing the third digital webcast  
signal to a wide area network.

6. A method of webcasting media content over a satellite communication link  
having a transmission propagation delay and including a communication satellite, said  
method comprising:

encoding said media content into a first digital webcast signal having a first digital  
webcast format that is sensitive to the transmission propagation delay, said first digital  
webcast format requiring the receipt of at least one transmission acknowledgment signal;

uplinking the encoded media content across the satellite communication link by an  
uplink method comprising:

receiving the first digital webcast signal;

10 providing the at least one transmission acknowledgment signal required by the  
first webcast format;

converting the first digital webcast signal to a second digital webcast signal  
being insensitive to the transmission propagation delay of the satellite communication  
link;

15 converting the second digital webcast signal into a satellite transmission  
signal;

transmitting the satellite transmission signal to the communication satellite;

and

downlinking the satellite transmission signal for reception on the earth.

7. One or more computer-readable media having computer-executable instructions for performing the method of claim 6.

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